Amendments to the Specification:

Please replace paragraph [05] with the following paragraph:

[05] The present invention takes these types of issues into consideration and allows for adjustment of the valve lift amount without disassembling the valve mechanism by adjusting the position of the connector pin that connects two links comprising the valve mechanism, and has as its main purpose[[,]] the achievement of adjustment time reduction and productivity improvement through the further simplification/increase in efficiency (automation) of this kind of lift adjustment.

Please replace paragraph [16] of the specification with the following paragraph:

[16] Therefore, valve lift adjustment without replacement of links is desirable. As one example of this, adjustment of the valve lift is conceivable by changing the position of a rotatable connector pin that connects to two links that comprise a variable valve mechanism. ~~For~~ This can occur, for example, by forming a pin guide hole to which the ~~aforementioned~~ connector pin could movably mate to one of the ~~aforementioned~~ two links and the connector pin could be sandwiched and held by a pair of adjustable bolts. When adjusting the valve lift amount, the connector pin position would be adjusted by adjusting the bolts, using suitable adjustment tools such as a wrench, and by tightening the bolts after adjustment. Accordingly, the valve lift adjustment is ~~conceivable~~ possible without disassembling the valve mechanism.

Please replace paragraph [21] with the following paragraph:

[21] Drive shaft 11 is connected to a crankshaft via a transmission mechanism not shown in the figure such as a chain or a pulley and moves rotationally connected to the crankshaft. Also, as shown in FIG. 6, drive shaft 11 extends in the cylinder row direction (perpendicular to the paper surface of FIG. 6) and is rotatably supported above cylinder head 2. Cylinder head 2 is comprised of head lower 2A ~~that~~, which sandwiches and holds rotatable drive shaft 11, and ladder-frame shaped head upper 2B, ~~consisting~~ which consists of a plurality of integrated bearing caps and ~~that~~ is fixed to the upper surface of head lower 2A. Further, drive shaft 11 and control shaft 14 are provided for a cylinder row comprised of a plurality of cylinders and are shared by all cylinders comprising the cylinder row. With respect to this,

component parts 12, 13[[,]] and 15 through 23 for lift/operation angle varying mechanism 10 are provided for each of the cylinders that comprise the cylinder row.

Please replace paragraphs [23] through [25] with the following three paragraphs:

[23] In terms of a brief explanation of the operation of this lift/operation angle varying mechanism 10, when driveshaft 11 ~~that is connected to the crankshaft~~ is rotated, rocker arm 16 oscillates via eccentric drive shaft portion 12 and first link 17, the oscillation motion of this rocker arm 16 is transmitted via second link 18 to oscillating cam 13, and oscillating cam 13 oscillates. Oscillating cam 13 contacts valve lifter 1A provided above intake valve 1, and by pressing against this ~~[~~valve lifter~~]~~ 1A, intake valve 1 opens and closes, or in other words, lifts against the valve spring reactive force.

[24] In addition, changing the rotational position of control shaft 14 by means of operation angle actuator 19 will change the center position of eccentric control shaft portion 15, which is the oscillation support point of rocker arm 16. By doing this, the range of oscillation for oscillating cam 13 varies, while the center phase of the operation angle of intake valve 1 remains nearly steady in relation to the crank angle (crankshaft rotational position)~~, and the~~ . The size of the valve lift for intake valve 1 (maximum lift) and the operation angle will both vary continuously and smoothly ~~[~~(not in stages~~]~~). The control status of this lift/operation angle varying mechanism 10 is detected, for example, by a control shaft sensor (lift sensor), which is an angle sensor that responds to the rotational position of control shaft 14.

[25] This kind of lift/operation angle varying mechanism 10 enables continuous change of both valve lift and operation angle of intake valve 1~~, and in addition,~~ and provides the following kinds of unique interaction effects. Since most connecting points of each link element are surface contacts, lubrication is easy, and reliability and durability are superior. Because there is no need to use a biasing means such as return springs, the configuration is simple, and reliability and durability are superior. In addition, ~~[~~this mechanism 10~~]~~ can be easily applied without major changes to layout with respect to internal combustion engines with direct acting valve systems because drive shaft 11 and oscillating cam 13 can be located in almost the same position as a preexisting direct acting valve system camshaft and fixed cam.

Please replace paragraphs [30] and [31] with the following two paragraphs:

[30] The position of connector pin 22 is changed and maintained in adjustment direction 34 by a pair of holders, first holder 36 and second holder 37, that sandwich and hold connector pin 22 in the adjustment direction 34. Holder mating holes 38 and 39 into which holders 36 and 37 respectively mate[[,]] are formed at pin mating portion 33. Each of holder mating holes 38 and 39 ~~are~~ is formed along the adjustment direction 34, and in addition, one end of each opens to pin guide hole 35. Threaded portions are formed on the outer surfaces of holders 36 and 37 and the inner surfaces of holder mating holes 38 and 39 that screw together. As described below, bolt-shaped holders 36 and 37 are turned with socket wrench 41 and hex wrench 42 used as adjustment tools (see Figure 1), and the position of connector pin 22 is adjusted by loosening or tightening holders 36 and 37 through the threaded portions.

[31] On first holder 36 at the edge of the opposite side of pin guide hole 35[[,]] is formed bolt head 43 as the first tool mating portion that mates to socket wrench 41, which is used as the first adjustment tool that turns first holder 36. Bolt head 43 has a polygonal shape such as the hexagonal shape pictured. On second holder ~~36~~ 37 is formed tool mating hole 44 as a second tool mating portion that mates to hex wrench 42, which is used as the second adjustment tool that turns second holder 37. This tool-mating hole 44 is an elongated hole[[,]] with a hex-shaped cross-section that matches hex wrench 42, and the hole 44 extends in the adjustment direction with one end opening to the end of pin mating hole 35. Furthermore, tool insertion holes 45 and 46 that enable insertion of the hex wrench are penetration-formed in first holder 35 and connector pin 22. These tool insertion holes 45 and 46 are set with a larger diameter than hex wrench 42 and tool-mating hole 44.

Please replace paragraph [34] with the following paragraph:

[34] Since connector pin 22 is securely fixed and held to pin mating portion 33 by ~~holder~~ holders 36 and 37 when assembled, as illustrated in the second embodiment shown in FIG. 8, which is explained below, a retaining head and flange that protrude further than the axial direction of second link 18 are not provided at both ends of connector pin 22 so that both ends of connector pin 22 are positioned nearly flush with side surfaces of second link 18, resulting in reduction of weight and size.

Please replace paragraphs [47] through [49] with the following three paragraphs:

[47] As a specific example of adjustment from a single direction using the adjustment tools, pin guide hole 35 is formed~~, into which~~ for connector pin 22, which is movably mated in prescribed adjustment direction 34 along the radial direction at pin mating portion 33 on one of the two links~~; and the~~. The position of connector pin 22 is adjusted by adjusting a pair of holders, first holder 36 and second holder 37, that sandwich and hold connector pin 22 in the adjustment direction 34. Also, the configuration is such that positional adjustment of first and second holders 36 and 37 is performed from a single direction, or adjustment direction 34.

[48] More specifically, first and second holder mating holes 38 and 39 are formed that extend along the adjustment direction at pin mating portion 33, with one end of each open to the pin mating hole 35, and into which the first and second holders 36 and 37 are screwed~~; first~~. First tool mating portion 43 is formed at one end of first holder 36 to which first adjustment tool 41, such as a socket wrench, mates and rotates first holder 36~~; second~~. Second tool mating portion 44 is formed at one end of second holder 37 to which second adjustment tool 42, such as a hex wrench, mates and rotates second holder 37~~; and tool~~. Tool insertion holes 45 and 46 arepenetration-formed to allow the second adjustment tool 42 to be inserted through the first holder 36 and connector pin 22.

[49] According to the configurations described ~~in (4) and (5)~~ above, the position of the connector pin can be adjusted with a relatively simple structure that uses two holders (bolts) 36 and 37, thus allowing for a reduction in size and weight, higher reliability and easier assembly operations.

Please replace paragraph [53] with the following paragraph:

[53] The lift adjustment method pertaining to the present invention is characterized by step 1 in which the valve lift amount is measured with the valve mechanism in the assembled state, and steps 2 through 4 in which, based on the results of the valve lift measurement, drive shaft 11 is set in a prescribed rotational position and intake and exhaust valve lift amounts are adjusted by adjusting the connector pin position from a ~~singe~~ single direction using prescribed adjustment tools.